WHAT IS CLAIMED IS:

1. A combination catheter comprising:

a catheter tube having a distal end portion fixed in a first curve such that the longitudinal axis of the distal end portion of the catheter tube defines a first plane;

an inner medical element having a distal end portion extending distally from the distal end of the inner medical element, said distal end portion being fixed in a second curve such that the longitudinal axis of the distal end portion of the inner medical element is disposed substantially out of the first plane.

2. The combination catheter as set forth in claim 1 wherein the inner medical element is fixed rotationally with respect to the catheter tube.

3. The combination catheter as set forth in claim 1 wherein at least one of the catheter tube and the inner medical element have curves preformed in their distal end portions.

4. The combination catheter as set forth in claim 1 wherein at least one of the catheter tube and the inner medical element are remotely controllable to fix curves in their distal end portions.

5. The combination catheter as set forth in claim 1 wherein said first curve has a first radius of curvature and the second curve has a second radius of curvature, both curves being disposed a distance from the respective distal ends of the catheter tube and the inner medical element not substantially greater than three times the smaller of the first and second radii of curvature.

6. The combination catheter as set forth in claim 1 wherein the first plane is disposed at an angle of substantially ninety degrees with respect to the second plane.

7. The combination catheter as set forth in claim 1 wherein said first curve has a first arc length and said second curve has a second arc length, each curve being disposed from the distal end of its corresponding tube or element respectively a distance no greater than three times the smaller of the first and second arc lengths.

8. The combination catheter as set forth in claim 1 wherein the smaller of the first and second curves defines a volume generated by mathematically rotating the smaller curve about an axis of that curve which overlaps at least part of the tube or element containing the larger curve.

9. The catheter as set forth in claim 8 wherein said volume overlaps at least part of the larger curve.

10. The method of forming the shape of a combination catheter comprising:

disposing a catheter tube in a human body, said catheter tube having a distal end portion fixed in a first curve such that the longitudinal axis of the distal end portion of the catheter tube defines a first plane;

disposing an inner medical element in the catheter tube, said inner medical element having a distal end;

fixing the distal end of the inner medical element in a second curve such that the longitudinal axis of the distal end of the inner medical element is disposed substantially out of the first plane.

11. The method as set forth in claim 10 further including fixing the inner medical element rotationally with respect to the catheter tube.

12. The method as set forth in claim 10 wherein at least one of the catheter tube and the inner medical element have curves preformed in their distal end portions.

13. The method as set forth in claim 10 wherein at least one of the catheter tube and the inner medical element are remotely controllable to form curves in their distal end portions.

14. The method as set forth in claim 10 wherein the first curve has a first radius of curvature and the second curve has a second radius of curvature, the first and second curves being separated in operation by no more than three times the smaller of the first and second radii of curvature.

15. The method as set forth in claim 10 wherein the first plane is fixed at an angle of approximately ninety degrees with respect to the second plane.

16. The method as set forth in claim 10 wherein the first curve has a first arc length and the second curve has a second arc length, the first and second curves being separated in operation by no more than three times the smaller of the first and second arc lengths.

17. The method as set forth in claim 10 wherein the smaller of the first and second curves defines a volume generated by mathematically rotating the

smaller curve about an axis of that curve which overlaps at least part of the tube or element containing the larger curve.

18. The method as set forth in claim 17 wherein said volume overlaps at least part of the larger curve.